

The background of the entire page is a photograph showing the dark silhouettes of several saguaro cacti in the foreground. In the background, a range of mountains is visible under a sky with a warm, orange and yellow glow, suggesting a sunset or sunrise.

ADOT Environmental & Enhancement Group

Annual Report FY 2005

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Mission Statement

The Environmental and Enhancement Group (EEG) provides Environmental, Enhancement and Scenic Roads services for transportation activities through compliance with regulatory requirements, providing the highest level of professional technical support and education to our agency and customers, while building cooperative relationships with other government agencies and the public.

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EEG has three sections: Technical, Planning, and Transportation Enhancement and Scenic Roads. The Planning and Technical sections assure that all ADOT construction projects comply with environmental law, and help protect sensitive environmental areas within the state. The group has also assumed responsibility for certain additional environmental issues within ADOT, and provides technical assistance, education, and expert advice on numerous environmental matters. The functions performed in and by the planning and technical sections of the group are, for the most part, mandated by either state or federal law. ADOT EEG maintains a web site www.adotenvironmental.com, which provides not only guidance to ADOT environmental partners, but also presents information about the group for the general public.

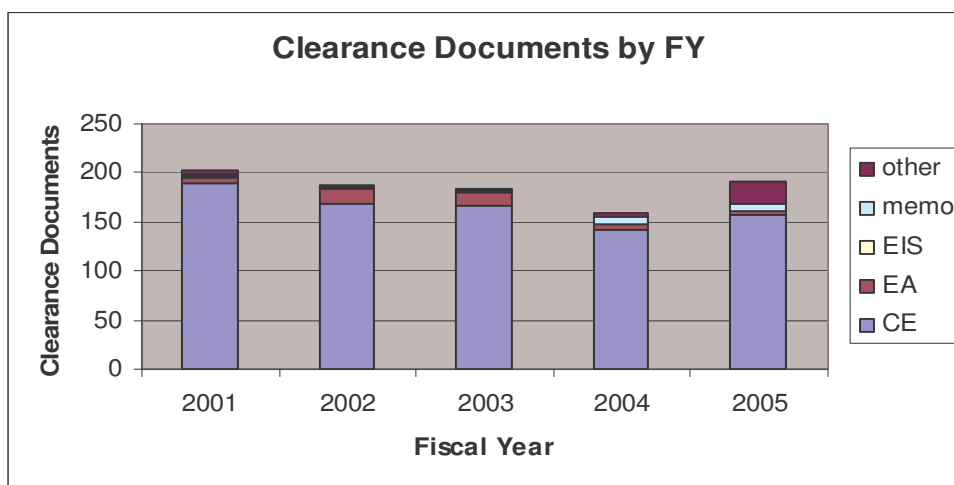
The Transportation Enhancement and Scenic Roads Section is the newest section of EEG. This section administers Arizona's funding allotment from the very popular Transportation Enhancement program initiated by ISTEA and continued in further transportation authorizations. The program staff used a competitive selection process to distribute \$16.5 million in FY 2005 for the enhancement of city, county, state, tribal, or federal transportation related features in Arizona.

At the present time, EEG maintains in-house expertise in air quality, archaeology, biology, environmental planning, noise, hazardous waste, water issues and landscape architecture. The staff of 42 employees makes extensive use of on-call consultants during the preparation of Transportation Enhancement projects, the Scenic Roads program and the preparation of requisite environmental documents.

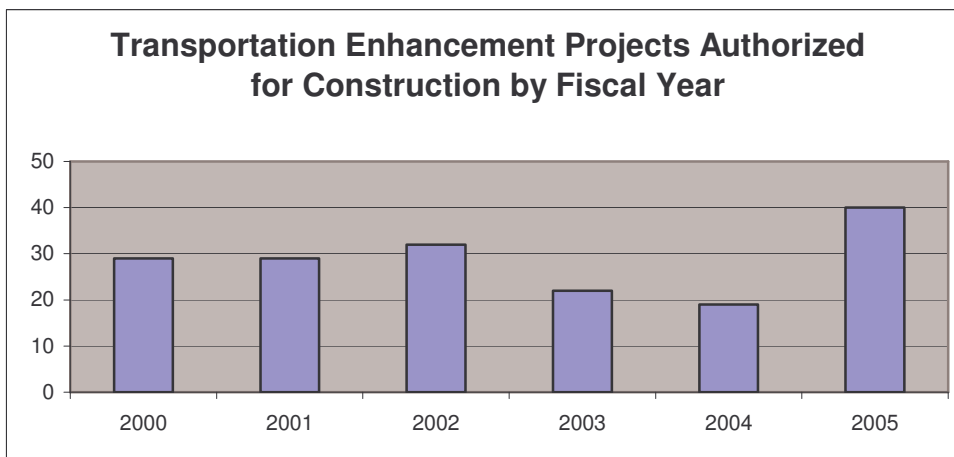
SUMMARY

This report presents a brief summary of EEG's FY 2005 accomplishments in its many areas of responsibility: NEPA Plan Review, Public Participation, Air and Noise Management, Hazardous Materials, Historic Preservation, Enhancement and Scenic Roads and Project and Process Tracking. EEG consistently strives to improve its operations by providing improved service, lower costs, and greater effectiveness. EEG programs continue to achieve recognition for their quality and innovation in competitive professional venues.

The Group uses a variety of methods to continuously monitor its performance and improve its value to the ADOT organization. One measure of this work is the number of environmental clearances actually issued within a fiscal year. This number is highly dependent on the number and type of projects put forward by ADOT; however, EEG products consistently meet or precede project deadlines. In the coming year, EEG plans to continue improving operations through implementation of team processes for certain projects.



The Transportation Enhancement Scenic Roads (TE/SR) Section has implemented new procedures which enable faster processing and better oversight of the state's enhancement work. Backlogs from the past are being eliminated, and the section processes ever increasing numbers of applications for its growing project dollars.



**This report presents
accomplishments in the following
categories:**

**Environmental Planning
NEPA Development
Public Participation**

**Environmental Technical
Air and Noise Management
Hazardous Materials
Historic Preservation**

**Enhancement and Scenic Roads
Project and Process Tracking**

Environmental Planning

NEPA Development

EEG's Environmental Planning Section manages and produces the hundreds of environmental documents required by ADOT's construction and enhancement efforts on an annual basis. These documents insure that all relevant environmental factors are appropriately addressed and mitigated. The section is the largest within the group, and staff must all maintain a broad background in multiple environmental and public concerns. In particular, the planners must understand the National Environmental Policy Act (NEPA).

EEG's NEPA planners continue to make ADOT's requirements for adequate environmental evaluations more consistent and comprehensible. In June of 2005, after months of work and review, the section posted revised requirements for the preparation of categorical exclusions (CEs) on their web site. CEs have been improved to make them more useful for the planners and consultants. Similar

efforts have been completed for a variety of required documents.

The NEPA process continues to seek out streamlining opportunities within their operations through coordination with consultants, tribes, and other agencies. One high priority project, the South Mountain Freeway Environmental Impact Statement (EIS) has required a multitude of coordination meetings with agencies, and especially, the Gila River Indian Community. Another interesting project is located in the northwest corner of Arizona, near the new Hoover Dam highway project. Arizona's largest herd of desert bighorn sheep claims this area as home, so special mitigation measures have been planned. The new four lane roadway will be constructed to include structures designed to enhance sheep passage across the highway.



Bighorn Sheep are a prized Arizona Resource.

Similarly, two joint project agreements were completed which provide in-lieu payments for other forms of biological impacts. The Nature Conservancy received \$20,000 to offset the costs of mitigation for the southwestern willow flycatcher on the Verde River. The Prescott National Forest received funds due to permanent wetland impacts from the Verde River Bridge and the Camp Verde Segment 2 project. In lieu funds enable

organizations to provide more effective mitigation in areas more remote from land adjacent to highways, thus providing more enhanced resources for wildlife in areas away from highways.

Public Participation

Public participation is an important component of the NEPA plan review process. EEG Planning staff host numerous public events where concerned individuals can share their opinions and learn about ADOT projects. EEG staff remains current and progressive with regard to public meetings, and updated their skills with training. The group also reviewed a pilot program for hosting public meetings that uses wireless keypads to collect information from individuals attending public meetings, which may be used at ADOT meetings in the future. This technology will allow less vocal participants to have their opinions considered equally with more outspoken attendees. Although issues are sometimes contentious, the public meeting process provides a forum to resolve differences.



The Patagonia Rockfall Site

In one particularly successful example, the Patagonia Rockfall Public Involvement and Environmental Mitigation Process not only addressed participants concerns, but also received statewide top honors from the National Partnership for Highway Quality. The

project went forward as a state winner and received national recognition in the late summer of 2005.

EEG also extends education into its public participation efforts. The group sponsored 10 Brown Bag workshops, covering a multitude of transportation and environmental issues. In June of 2005, EEG helped present a three day Community Impact Assessment Workshop, attended by over 150 people representing various disciplines in highway development. Notices of public hearings, and notes from both brown bag meetings, and the community workshop are all available on the EEG website.

Environmental Technical

Air and Noise Management

The technical section contains EEG expertise in air, noise, hazardous materials, and historic preservation. In FY 2005, staff within the air program received training and began evaluating projects with the latest version of EPA Mobile6.2 emission factor calculation program. Air staff, working with ADOT Video Services, produced and released a public education video, which has garnered three awards.

Noise program staff worked with FHWA to refine ADOT's Noise Abatement Policy, which is used to determine the conditions under which ADOT will provide mitigation such as noise barriers as part of their highway construction program. Noise staff implemented use of FHWA's required new noise model the Traffic Noise Model (TNM2.5), and partnered with FHWA and others in continuing their evaluation of the noise impacts of ADOT's Quiet Pavement Pilot Program, which was initiated in August of 2003.

The construction of the 115 miles of road surfacing in five different phases will be completed this fall, and the project has maintained a consistent monitoring program which will continue after construction is complete. Highway noise levels at sites adjacent



Noise monitoring equipment set up near roadway in December of 2004, contained results of testing that showed initial reductions of between 4.9 and 6 decibels from ADOT's rubberized resurfacing. The effort also includes a component to evaluate the impact of certain weather conditions on highway noise. Since historic data regarding noise reduction implies that the noise suppression benefits decrease with the age of the pavement, this will also be investigated. ADOT's Quiet Pavement Pilot Program is one of the premier efforts in the nation, and EEG staff members are frequently invited to present program information at conferences and seminars in the United States and Mexico.

Hazardous Materials

EEG hazardous materials staff responded not only to their regular requirements to provide professional support for hazardous materials in

to freeways are monitored before and after selected stretches of highway are surfaced with rubberized asphalt. The first progress report, completed

ADOT right of way, but also maintained a high profile in assisting ADOT with a variety of technical issues. Staff worked closely with ADOT Right of Way and the Attorney General's Office to address issues related to contaminants found in parcels acquired for highway construction, or resulting from large spills and overflows.



Picturesque old bridges often contain hazardous materials.

EEG's hazardous materials expert helped provide six day-long seminars for ADOT staff in order to foster better understanding of EPA asbestos maintenance and removal requirements. Staff partnered with other ADOT staff in incorporating additional elements into ADOT's Geographic Information System data base, including all pertinent jurisdictions; ADOT Districts, FHWA Districts, state highways, city and county boundaries. The hazardous materials team also submitted ADOT's Pollution Prevention Plan to the Arizona Department of Environmental Quality for review.

Historic Preservation

The work of the EEG Historic Preservation Team (HPT) in 2004-5 was highlighted by exceptional archaeological findings. Along Interstate 10 north of Cortaro Road near Tucson, a site was excavated in anticipation of the widening of the highway. Although the portion of the

site excavated was within the median of the highway, numerous features were identified and analyzed which indicated that the site may contain one of the earliest agricultural fields discovered within Arizona, predating previous discoveries by several hundred years. The site indicates complex agricultural system which may be one of the earliest identified in the entire continental United States. A further significant finding occurred along the route of Dobson Road in Chandler, where an extensive historic subterranean aqueduct was discovered. This discovery was featured by the Arizona Republic newspaper in both print and online pieces. ADOT work in the area will continue to document the finding and mitigate construction impacts.



Excavating a pit house near Santa Cruz bend

In addition to historical findings of both unique and more usual varieties, the HPT was a full partner of a joint process between ADOT and representatives from both Coconino and Kaibab National Forests, which identified ADOT maintenance and development projects anticipated in the next five years. Potential issues and resolution were discussed. This effort represents substantial progress toward improving the efficiency of the cultural consultation process within the forests. The HPT was deeply involved in organizing the 3rd Annual Statewide

Historic Preservation Conference, held in Tucson this past summer, which involved the participation of state, federal, and tribal agencies, as well as local governments, private consultants and others throughout the state with an interest in historic preservation.

Enhancement and Scenic Roads

FHWA first started providing Transportation Enhancement Funds in 1992. Arizona, unlike many other states which used the funds only for landscaping on State roads, instead created an innovative process whereby enhancement funds provide multi-modal, shared use paths, traffic calming, historic preservation, bicycle and pedestrian safety programs, archaeological planning, and preservation of natural environments that were proposed by individuals, neighborhoods, and communities. Arizona uses a broad-scale statewide competitive process to pay for projects proposed by local jurisdictions or the State. The program has funded over 150 alternative transportation projects for bicycle, pedestrian, environmental protection, as well as historic preservation and public art projects that enhance the quality of life in almost every jurisdiction in the state.



Tucson's Barrio Anita Mural Project received rave reviews.

Over the last three years, the Transportation Enhancement program has funded 73 projects, at a cost of over 13.5 million dollars. In 2004, nearly nine million dollars were allocated to nineteen new projects. The program is beginning to be recognized for its leadership in beautifying Arizona. In the fall of 2004, an environmental enhancement project along the Mojave Wash in Kingman won top honors in the Arizona Clean and Beautiful Governor's Pride in Arizona competition. The program also was recognized by Valley Forward in recognition of the good work in the Phoenix 7th Avenue at Glenrosa project.



Arizona's roads present beautiful vistas in both winter and summer.

The Scenic Roads Program within EEG continues to be one of the most respected in the country. Arizona's Scenic Roads program put forward a record eleven grant applications for federal Scenic Byways funds last year, and four Corridor Management Plans were completed. In March of 2004, Arizona submitted applications for four of its roads to be recognized with the desirable designation. The Scenic Roads beautifully designed website, www.arizonascenicroads.com was selected to receive the Odyssey award

by the Travel Industry Association of America. The innovative website is one of the first of its kind in the nation, and offers photo tours, feedback pages, and an interactive map of Arizona. Odyssey Awards are the premier recognition program for the \$552 billion travel industry. The Scenic Byways Program coordinator has become an in-demand speaker on the state and national scene, and was chosen to sit on the national review committee for Federal Scenic Byways designation.

Project and Process Tracking

Two significant achievements were completed in FY 2005 which continued the progress of understanding, automating, and streamlining operations. EEG in partnership with ADOT's Program and Project Management Section (PPMS) completed a centralized database which maintains information regarding the number of projects, responsible staff, due dates, concerns and the current status of the project for each specialty (air, water, hazardous materials, etc.). Most frequently used reports from the system are automated, and, rather than being stand alone, these data link directly with certain other ADOT data bases. Secondly, each of the multitudinous processes within EEG was analyzed, tracked, and placed into a flowchart. This effort not only increased understanding of exactly how the processes work, but also will allow analysis of further streamlining opportunities. Process flow charts can be accessed through the EEG website.

EEG also initiated a series of Cross Functional Team efforts for certain pilot projects. The teams serve multiple purposes, including enhanced teamwork, identification of process improvement opportunities, and increased EEG teamwork.